

MODEL 409

Liquid Level Controller

- Automatic control of liquid level
- Solid-state sensing circuit
- Adjustable sensitivity
- 5-Year Unconditional Warranty



FRONT VIEW

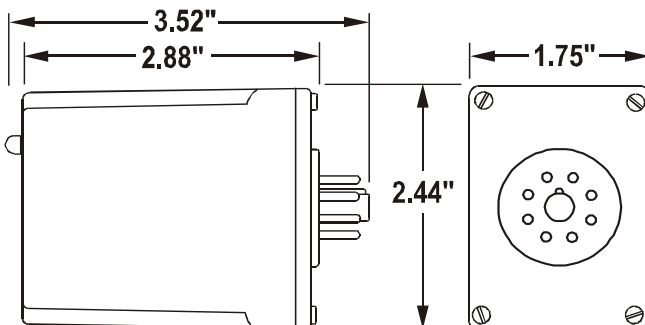


TOP VIEW

DESCRIPTION

The Model 409 is a compact, socket-mount device for level control of conductive liquids. The internal relay is energized when operating power is applied. When the liquid level reaches the probe, the relay de-energizes. When the level drops below the probe, the relay will reset. A fixed, two second time delay prevents oscillation due to wave action. Probe cables may be shielded or unshielded. If the liquid container is made of a non-conductive material, a common electrode is required. Other features include an LED indicator to show the output relay status and an adjustable sensitivity setting. Requires standard 8-pin octal socket (socket number 51X00120-01).

DIMENSIONS



(dimensions have tolerance of ± 0.06)

SPECIFICATIONS

Model	409	
Operating voltages	24 VAC:	20-30 VAC, 50-400 Hz
	120 VAC:	90-140 VAC, 50-400 Hz
	230 VAC:	200-250 VAC, 50-400 Hz
Power consumption	2.5W	
Transient Protection	2500VRMS for 10msec	
Probe voltage (open circuit)	15 Vrms	
Probe current	5mA maximum	
Sensitivity adjust	1K ohms-100K ohms	
Contacts	SPDT	
Contact Rating	10A @ 240 VAC resistive	
Expected Relay Life	Mech:	10,000,000 operations
	Elec:	100,000 at rated load
Response Time	2 seconds	
Reset Time	<1 second	
Reset Method	Automatic	
Time delay accuracy	$\pm 5\%$	
Operating Temp	- 40° to 60° C	
Humidity Tolerance	0-97% w/o condensation	
Case Material	ABS plastic	
Weight	4.5 oz. Max.	

Telephone: Main - (918) 438-1220
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E-mail: sales@time-mark.com
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CORPORATION

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MODEL 409

Liquid Level Controller

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

GENERAL SAFETY

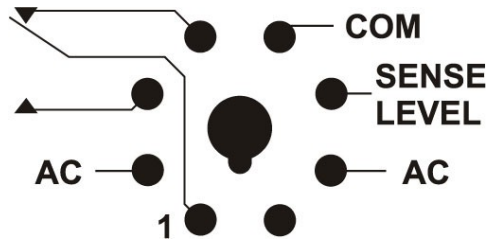
POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 409.
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

Installation Instructions

INSTALLATION

Mount the 8-pin socket in a suitable enclosure. A NEMA-1 rated enclosure, designed for socket-mounted relays, is available from Time Mark (part no. 98A498).

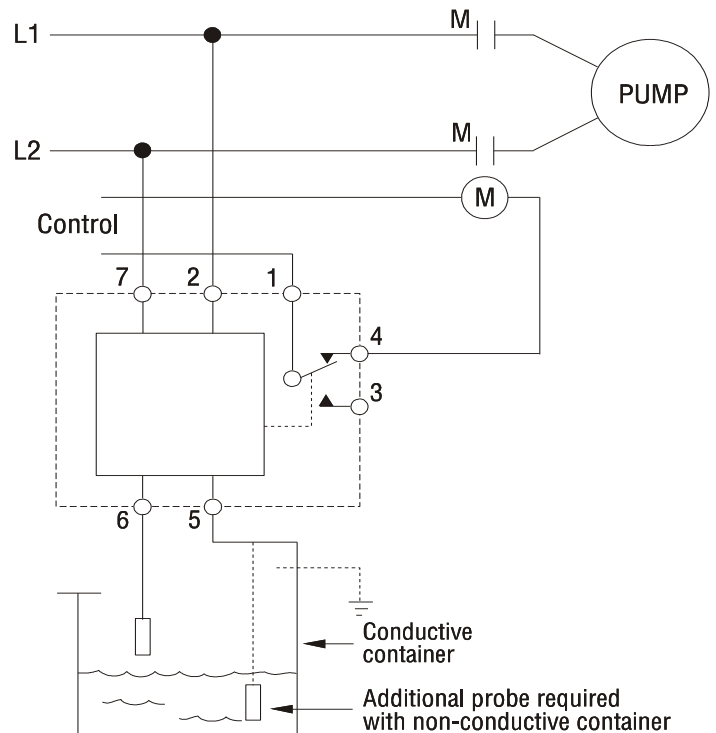
Referring to the pin diagram on this page or on the unit connect appropriate AC operating power. Connect the probes as needed, and connect the output relay as appropriate.



ADJUSTMENT

Adjust the sensitivity as needed.

TYPICAL APPLICATION



WARRANTY

The **Model 409 Liquid Level Controller** is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. If the this device fails to operate, for any reason, we will repair or replace it free, for five years from the date of purchase. Contact the Time Mark Sales department, Monday through Friday; 8 a.m. to 5 p.m., CST, for further details.

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